

A history of concern for the environment...

As early as 1888, the Corps reported concerns about reduced numbers of fish on the Columbia and recommended establishing fish hatcheries and regulating salmon fishing.

Today, Portland District's environmental efforts range from large wetlands restoration projects like construction of water fowl impoundment areas at Fern Ridge Lake, to helping save a small creature like the western pond turtle.



Western pond turtle

Corps dredges recovered nearly 400,000 gallons of oil from the waters of Alaska's Prince William Sound after the Exxon Valdez ran aground.



Corps dredge in Alaska

We also modify existing projects for environmental improvement, such as using dredged material to create nesting sites for waterfowl and modification of water control structures to improve downstream water quality for fisheries.

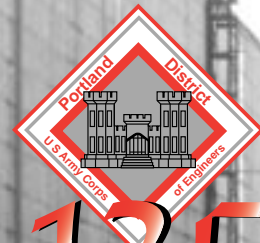


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125
Years

Portland District: A History of Service to the Northwest

Portland District is proud of its 125 years of service to the region...

In the past, Portland District, U.S. Army Corps of Engineers, constructed coastal fortifications, cleared river channels, and surveyed the frontier. In the future our efforts will focus on resource management and a growing role in environmental



Umpqua River, OR, harbor



Portland night skyline

protection. Through 125 years of changes and challenges, Portland District has responded to the needs and concerns of the people of this region. We look forward to continuing to do so for another 125 years.

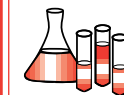
Fun activities just for kids...



Maps Trace a map of Oregon and Washington from an atlas. Draw in the rivers and write their names. Can you locate important landmarks, like Bonneville Dam and Mount St. Helens, on your map?



Numbers The Corps has spent \$1.2 billion to build projects that store flood waters. They have prevented \$15.8 billion in damage to homes and property. Subtract the money spent to build the projects from the amount of damage prevented to see how much money was actually saved.



Science A small bird called the snowy plover is endangered because invading grasses grow on sand dunes and keep the bird from building its nest. This summer, Corps dredging ships will spray ocean water on the dune grass to kill it and help save the birds. Why will ocean water kill the grass? (hint: taste ocean water!)



Art Draw a picture of yourself doing your favorite outdoor activity at a Corps project. Are you fishing, swimming, boating, picnicking or camping? Be sure to draw a big smile on your face!



Words The Corps uses many technical words in their work. Look these words up in your dictionary, then use them to impress your friends: smolt, habitat, migrate, hatchery, spawn. (hint: they all have to do with fish)



Reading Many stories have been written about our region's past. Check out one of these books from your local library: *Volcano, the Eruption and Healing of Mount St Helens* by Patricia Lauber (Newbery Honor book); *Come Back, Salmon* by Molly Cone; *Journey West on the Oregon Trail* by Cecile Alyce Nolan; and *The Way West: Journal of A Pioneer Woman* by Angelia Stewart Knight.



The History of Portland District

| 1871 | 1880s | 1896 | 1918 | 1937 | 1940s | 1948 | 1957 | 1968 | 1970s | 1980 | 1989 | 1992 | 1993 | 1996 | 2000 |
|----------------------------------|---------------------|--------------------------|--------------------------|--------------------------|---------------------------|--------------|--------------------------------|---|------------------------|-----------------------------------|-----------------------------------|--|---------------------------------------|--------------|------|
| Portland Engineers Office opened | Jetties constructed | Cascades Canal completed | Columbia channel dredged | Bonneville Dam dedicated | Willamette Projects built | Flood of '48 | The Dalles Lock and Dam opened | John Day Lock and Dam Project dedicated | Rogue River dams built | Mount St. Helens recovery efforts | Alaska oil spill recovery efforts | Bonneville second powerhouse completed | Bonneville new navigation lock opened | Flood of '96 | |

Opening the frontier...

The Corps can trace its beginnings to the American Revolution, but Portland District began in 1871 when Maj. Henry M. Robert rented a one-room office in the Portland First National Bank Building and furnished it with a desk, a map case and four chairs.



Bucket dredge

Northwest waterways provided a way to export local wheat and mining rushes, to import supplies, and to transport passengers. But coastal harbors

were unreliable and the rivers were full of snags, drifting sandbars and dangerous rapids. The goals of the new Portland Engineers Office were to eliminate impediments to navigation in local rivers and to obtain a precise knowledge of the territory.

Corps engineers surveyed local rivers and rapids; provided dredging, snagging, rock removal and bank protection; and deepened or built harbors and deep-draft ports. Corps-built jetties provided safe water at Coos and Yaquina bays and the mouths of the Siuslaw, Coquille and Nehalem rivers. By 1918, a 300-foot-wide, 30-foot-deep navigation channel extended from Portland, Oregon, to the ocean.



Jetty construction

Growth and resources planning...



Bonneville Dam turbine

Portland District expertise in navigation projects led to related missions: flood control, shore protection, hydropower, water supply, environmental protection, and, during World War II, military construction.

Bonneville Dam, the first Federal multiple-purpose project on the Columbia, covered the dangerous Cascade Rapids, provided fish ladders to protect the region's fish, and generated electricity for local homes and industry. When The Dalles Dam opened in 1957, the pool behind the dam flooded rock obstructions in the old open river channel and made irrigation of the adjacent land more economical.

The Flood of '48 eroded developed agricultural land, submerged 650 blocks of downtown Portland, and took the lives of 39 people. New dams and reservoirs provided flood control. Without this ability, the 1964-65 flood would have surged over Portland's sea wall and debris would have damaged every bridge crossing the Willamette except the St. Johns.



Oregon flooding

Balancing needs...

Portland District encompasses nearly 97,000 square miles of land and water in Oregon and southwest Washington. Conflicts among competing users of water are likely to grow as the region grows. The District's future is tied to helping to balance the region's competing needs.



Bonneville Dam lock

We operate navigation locks on the 465-mile Columbia-Snake Inland Waterway and our dredges help maintain 720 miles of federal navigation channel and harbors.

Thirty million tons of cargo pass through Portland District ports and locks each year.

The '96 flood would have been much worse if the Corps hadn't been able to store water behind the dams as it poured into the rivers from uncontrolled tributaries. Our flood storage projects—a \$1.2 billion investment—have already prevented \$15.8 billion in flood damages.

Portland District projects generate 60 percent of the region's hydropower to meet the growing demands of public and private utilities, cities and industry for clean, abundant, inexpensive electricity.



Electrical equipment

Our reservoirs supply irrigation for local farmers and supplement municipal and industrial water needs. Our projects also provide opportunities for fishing, boating, swimming, picnicking and camping.



Summer fun at the lakes.



Mount St. Helens cleanup

To protect the environment, Portland District regulates work in water and fragile wetland areas along waterways. We control water released from the dams to protect natural habitats during periods of fluctuating flows.

When Mount St. Helens erupted in 1980, District crews helped limit its damaging effects on water quality and on the natural recovery of fish, wildlife and plant species.

The biggest challenge Portland District faces may well be that of helping fish pass through the dams safely. The District has built and funds eight fish hatcheries, and every aspect of upstream and downstream passage is being evaluated. Since the 1950s, the Corps has spent more than \$70 million researching ways to protect fish in the Columbia-Snake River system.

